## Acorus calamus L.



## A Sacred Medicinal Plant of the Native Cree.

Family: Araceae (Arum Family)

Common names: Calamus root, sweet flag, rat root, sweet sedge, flag root, sweet calomel, sweet myrtle, sweet cane, sweet rush, beewort, muskrat root, pine root, racha (India), shih-ch'ang pu (China), makan-ninida (Omaha and Ponca), mankan-kereh (Winnebago), kahtsha itu (Pawnee), sinkpe-ta-wote (Dakota), sanka ce (Lakota), pexe boao'ka (Osage), wi'ukh is e' evo (Cheyenne), moskwas'wask (Algonquian), muskwe s uwesk (Penobscot), weekas (Cree).

Related species: Acorus gramineus, Acorus americanus

**Description:** Sweet flag is a grass-like, rhizome forming, perennial that can grow to 2 meters high, resembling an iris. This species inhabits perpetually wet areas like the edges of streams and around ponds and lakes, in ditches and seeps. It often shares habitat with the common cat-tail.

The plants have long creeping roots that spread out just below the surface of the soil. These roots spread horizontally and can grow to almost 2 meters in length for old, well established specimens.

The thick, erect leaves are very similar in appearance to those of an iris, but with edges that are crimped.

Plants very rarely flower or set fruit, but when they do, the flowers are 3-8 cm long, cylindrical in shape, greenish brown and covered in a multitude of rounded spikes. The fruits are small and berry-like, containing few seeds. Flowers from early to late summer depending on the latitude.

Calamus is associated with the muskrat in many native American cultures as the rodent consumes copious quantities of the root.

**Native to:** Most Northern Latitude countries around the World. May have been widely dispersed around the United States by Native Americans who planted the roots along their migratory paths to be harvested as needed. Calamus can often be found growing close to the sites of Indian villages, camping areas or trails.

**Cultivation parameters:** Calamus is a hardy, easy to grow addition to most peoples medicinal/visionary gardens. New plants are almost always started from root divisions. Use at least a 5-6 cm piece of root, preferably firm, clean and aromatic, and free from any damage or infection. Plants can be divided in the Fall for Spring transplanting.

These plants will grow almost anywhere as long as there are adequate amounts of water present, and ample, full sunshine.

**Active constituents:** Monoterpene hydrocarbons, sequestrine ketones, (trans- or Alpha) Asarone (2,4,5-trimethoxy-1-propenylbenzene), and Beta-asarone (cis- isomer) contained in the roots essential oils.

The asarones are MDA type compounds that are the naturally occurring precursors of TMA-2. The psychoactive constituents break down over time lessening potency until at a year after harvest, the roots are considered worthless.

The American variety has consistently tested free of the carcinogenic Beta-asarone. The Asian varieties do contain varying amounts of Beta-asarone, and cause a more sedate feeling when ingested.

European varieties of sweet flag have yielded various sesquiterpenoids with as of yet unknown psychoactive or medicinal properties.

**Traditional/medicinal uses:** The Cree Indians of Northern Alberta use Calamus for a number of medicinal reasons including: as an analgesic for the relief of toothache or headache, for oral hygiene to cleanse and disinfect the teeth, the fight the effects of exhaustion or fatigue, and to help cure/prevent a hangover.

Other Native tribes used it to treat a cough, made a decoction as a carminative and as an infusion for cholic.

The Dakotas use calamus to treat diabetes, and there are several reported cases where of the root had cured people who had been given up by Western medicine. When calamus root was chewed regularly by the Indians, they would be miraculously cured of this disease within a matter of months.

The Sioux used the whole plant, making aromatic garlands from the leaves and using the root as a tea for bowel pains, or rubbed the chewed root on the skin for a general illness cure.

Sweet flag has been used in Asia for at least the last 2000 years for a number of beneficial reasons. The ancient Chinese used it to lessen swelling and for constipation. In India, Ayurvedic medicinal practice has used the magical root to cure fevers, for asthma and bronchitis, and as an all around sedative. The root was also used by the ancient Greeks and included in the traditional remedies of many other European cultures.

During the middle ages calamus was an admixture in several of the ancient, psychoactive, "witches flying ointments", often being mixed with solanacious herbs.

The root was also well-known in Biblical times and mentioned in Exodus 30: 22-25 as one of the ingredients of the "holy anointing oil".

Calamus was also known to many early American settlers and used for a number of folk remedies. Walt Whitman even wrote poetry about his beloved herb in "Leaves of grass".

Calamus was also widely used by Canadian Trappers working for the Hudson Bay Company, using it as a stimulant, chewing a small piece whenever tired.

The unpeeled, dried rhizome was listed in the U.S. Pharmacopoeia until 1916 and in the National Formulary until 1950, for medicinal use on humans.